

Date: Sun, 23 Oct 94 04:30:28 PDT
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: List
Subject: Ham-Equip Digest V94 #388
To: Ham-Equip

Ham-Equip Digest Sun, 23 Oct 94 Volume 94 : Issue 388

Today's Topics:

 AMP for cellular phone (800 MHz)
 Conversion of Commercial Radios
 DTMF control of mobile rig???
 IC-T21A or TH22AT for new HAM?
 kc5grw-ylw sheets
 Kenwood HT 22AT
 Need: Mizuho 6m HT Manual
 Need info on Midland 70-245BMX LMR radio
 Opinions on the Kenwood TH-22AT wanted
 opinions wanted on Kenwood TH-22AT
 RS HTX-202
 Ten Tec OMNI V/VI owners - HISS problem
 TH-48 mods wanted
 Yaesu FT900 mods?

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Oct 1994 13:22:04 -0400
From: nx7u@aol.com (NX7U)
Subject: AMP for cellular phone (800 MHz)

>My Nokia bag phone is rated at 6 watts. Most of the "mobile" cell phones

>and some of the handhelds give the full legal limit of six watts
according
>to my local Cellular 1 provider. Most of the handhelds are only 3 watts

or
>less.

Actually, it's like this:

Power class 0: mobile phones (in vehicles) max power output = 3watts.
power class 1: transportable phones (bag phones) max power is 4 dB less = 1.2W.
power class 2: portable phones (handhelds) max power is 8 dB less = 0.6 watts.

All phones are capable of being dynamically powered down by the cellular system to -28 dB of power class 0 (or 4.75mW)
nx7u@aol.com

Date: 22 Oct 1994 16:04:51 -0500
From: jdw@siesta.cs.wustl.edu (j d wilson)
Subject: Conversion of Commercial Radios

In article <JOHNZ-2110941632190001@edb252e.edb.utexas.edu>,
John Moore <JOHNZ@UTXVMS.CC.UTEXAS.EDU> wrote:

>Digipros,
>
>I see lots of commercial uhf/vhf radios at hamfests. I know that these
>(some of these?) can be converted for use on the ham bands. Is there a
>book or are there articles on commercial radio conversion?
>
>Thanks...kb5viw

John,

I've been working on modifying a 110W Motorola Micor for the amateur band. It would have been cheaper probably to use a GE, but the Motorola was really cheap. It has taken alot of work... Modified the Receiver, including the helical coils, and am presently getting 0.25 microvolt at -12 dB SINAD... Not bad for a radio rated at 0.35 microvolt!

Also modified the Tx exciter only. The PA deck will tune, but not very well. The whole purpose of this modification is to replace a tube type Progress Line transmitter, and Mastr Pro Receiver for the Washington University ARC repeater, W0QEV. The Tx is at 147.885, so I was able to get the Micor down from the spec'd low of 150.8 MHz, as it was a police mobile unit, that operated in the 155 MHz range.

As far as books go, I've not seen any, but I did find Micor mods on the net somewhere. You will need the Micor manual! I hope to publish my mods someday...

I know that Mitrek's can also be modified for 9600 baud packet, and can put you in touch with the guy here in St. Louis

that does the mods.

73,
j d wilson
n0tyz

Date: 21 Oct 1994 14:51 CDT
From: tech14c@elroy.uh.edu (Brad Killebrew N5LJV)
Subject: DTMF control of mobile rig???

The Kenwood TM-733A is also good at this. Also, used in conjunction with the cross-band repeater feature, it acts like a frequency agile remote base.

-Brad N5LJV

In article <94102103061791@salmon.islandnet.com>,
clinton.peebles@salmon.islandnet.com (Clinton Peebles) writes...

>
>To: HElliott@losat.redstone.army.mil
>
>H> I am considering which 2m/.7m mobile rig to buy. I want one that is
>H>remotely controllable via the DTMF pad on my HT. Is there such a beast?
>H>Which rigs are capable of doing this? Do any of the rigs have the
>H>capability to change frequencies through the DTMF control and provide some
>H>kind of audio readback of the frequency entered? Any advice would be
>H>appreciated.

>
>ICOM has a few that can do this. One is the 3230, but it I was told it
>has been discontinued and a new one released. Same radio, but with more
>memory channels. They also have another one that is a better radio, but
>can't remember what it's called. Sorry. You can get a voice chip that
>will read the frequency out. Great for a remote base. We have 2 back
>to back with a controller and solar power, to go up the mnt. but so far,
>no luck finding a building.... Untill yesterday :)

>
>Good luck.
>Clinton VE7KNL

>---
> ≥ QMPro 1.52 ≥ All rising to a great place is by a winding stair.

Date: Fri, 21 Oct 1994 11:32:27 -0200
From: kham@@network.ucsd.edu
Subject: IC-T21A or TH22AT for new HAM?

In article <CxMBzJ.2J3@eskimo.com>, crossfir@eskimo.com (LaCier Vincent) wrote:

> I can't decide between the ICOM T21A or the Kenwood TH22AT for my first
> radio. I think that they will both do what I need them for (local &
> repeater), and I would like any responses about them, here or e-mail.
> One of the questions that I have is I can't find CTCSS anywhere on the
> Icom, yet it accesses repeaters, and the Kenwood only has encode, do I
> need decode. The price difference really isn't much to sway my opinion.
> I just want a quality radio that will still be worthwhile in a few
> years.
>
> Any responses are _much_ appreciated.
>
> 73
>
> LaCier
> crossfir@eskimo.com

I have a TH-22 and it is the best little HT I have ever had. It's flat, not rectangular and boxy like the ICOMs, and so fits into the suit pocket comfortably. Also it has 3, that's 3 watts with regular battery. Only one thing that it doesn't have is an illuminated keypad. I think that Kenwood figured that most of us program at home and then operate the HT with one hand, changing freqs, etc. Also, my brother has a Yaesu HT-11 but that is only 1.5 watts in compact form. They now market it with a 5 watt batt but it is bigger than the TH-22.

Recently picked up a TH 79, which uses the same battery and is almost as small. I heartily endorse the TH 22 Dave KA7HDN/AE!

Date: 22 Oct 94 13:58:10 GMT
From: w5robert@blkbox.COM (Robert Wood)
Subject: kc5grw-ylw sheets

Mike, the yellow sheets usually have a classified in QST each month. Box 15142 Seattle WA 98115

--

73

Robert Wood
WB5CRG w5robert@blkbox.com

...phil

Date: Sat, 22 Oct 1994 23:38:34 GMT
From: schriber@crash.cts.com (Michael Schriber)
Subject: Need info on Midland 70-245BMX LMR radio

Hello all. I'm looking for some info on a Midland two way radio. It's a business band 460MHz or so unit. It's a model 70-245BMX Land Mobile Radio (LMR). It has 16 channel capability but it seems only one set is installed. When you're on channel one it seems to receive on two (It hits a local repeater and the repeater keys up on the output freq). Channel two is the output frequency and it sends and receives on that channel. All the other channels won't transmit. I looked inside and everything looks synth so I'm not sure how the other channels could be disabled or not installed.

Any information will on this radio will be greatly appreciated.

Mike Schriber
schriber@cts.com

Date: 22 Oct 1994 22:15:36 GMT
From: dbarton@emoryu1.cc.emory.edu ()
Subject: Opinions on the Kenwood TH-22AT wanted

I thought I'd crosspost to the proper group for fun...

dbarton@unix.cc.emory.edu wrote:
: TOM SUNMAN (tomsunman@aol.com) wrote:
: : I am almost ready to take my Technician class exams. I am currently
: : trying to determine which HT to buy. Today I was shown a Kenwood TH-22AT.
: : From what I was told and from what I could see it seems like a really nice
: : HT. I would please like more experienced opinions on this HT. I was
: : considering the HTX-202 but it seems the Kenwood is a better HT. All
: : opinions appreciated in e-mail or on this newsgroup. The price on the
: : Kenwood is nice as well.

: I purchased the HTX-202, and returned it to pick up the TH-22. I have
: been very happy with the 22. The signal reports I have gotten with the
: 22 are just as good as the ones from the 202, and I have not noticed an
: appreciable increase in intermod even in RF rich San Diego. If you have
: compared the two units, I am sure you are aware of the differences in
: features (more memories, wider RX). The size is a definite advantage as

: well. Kenwood was very prompt (two weeks) in returning my rebate check.
: There is also a much wider range of accessories available, and they are
: of higher quality.

: The one disadvantage is that to charge the supplied nicad battery the
: charger plugs into the radio. There is a standalone charger available
: for c.\$80. I suggest buying an alkaline battery pack as a backup.

: I have an extended TX mod if you are interested in such things, and I
: have not seen an extended RX mod anywhere.

: Happy Hamming,

: Doug
: KE6LZM
: --

: "No free man shall ever be debarred the use of arms. The
: strongest reason for the people to retain the right to keep and
: bear arms is, as a last resort, to protect themselves against
: tyranny in government." - Thomas Jefferson

: "Sometimes, I guess, there just aren't enough rocks."
: - Forrest Gump

--

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- Forrest Gump

Date: 22 Oct 1994 18:08:05 -0400
From: tomsunman@aol.com (TOM SUNMAN)
Subject: opinions wanted on Kenwood TH-22AT

I am almost ready to take my Technician class exams. I am currently trying to determine which HT to buy. Today I was shown a Kenwood TH-22AT. From what I was told and from what I could see it seems like a really nice HT. I would please like more experienced opinions on this HT. I was considering the HTX-202 but it seems the Kenwood is a better HT. All opinions appreciated in e-mail or on this newsgroup. The price on the Kenwood is nice as well.

Thank you!

Tom Randall

Date: Thu, 20 Oct 1994 01:03:00 GMT
From: clint.bradford@ectech.com (Clint Bradford)
Subject: RS HTX-202

D>In article <941013130029795@ectech.com>,
> clint.bradford@ectech.com (Clint Bradford) writes:

D>| Even more impressive, the HTX-202 heard signals through the
>| intermod, when the IC-2400 could not pull 'em out! Reason is
>| probably because we purposely limited coverage to ham band ONLY!
> ^^

D>Must you post this bloody advert every time the subject comes up?

That missive is a compilation of several reports on the HTX-202.
I only own a little stock in Tandy - I have no formal relationship
with them.

Do you have anything to add regarding the HTX-202's performamce to
this thread?

* QMPro 1.53 * Time flies like wind. Fruit flies like pears.

Date: 22 Oct 1994 18:37:40 GMT
From: ham@wam.umd.edu (Scott Richard Rosenfeld)
Subject: Ten Tec OMNI V/VI owners - HISS problem

To all devotees of the OMNI V/VI series...

Best radio I have ever had the pleasure of listening to. But it's got
this really annoying HISS, that's kinda high-pitched, right smack
dab in the middle of the audible range that really gets in the way
of copying that weak DX.

My IC-735 does it too, and in the same manner, but its tone is lower
and deosn't SEEM so invasive. What I've determined:

Bigger signals seem to mask the hiss.

It comes up along with the noise floor when you play with the volume

Reducing the RF gain reduces BOTH noise and the hiss, but the noise and/or signals go down first. With RF gain turned down somewhat, turning the AF gain brings the hiss WAY up above the noise.

The HISS is there even with the absence of a filter (i.e. NO RF signal)

The tone control (AF side) has no effect on the pitch, but accentuates the hiss when turned to the high-frequency end.

The passband tuning controls have no effect on the hiss.

When a signal is present, turning on SLOW AGC doesn't let the hiss pop up until the signal drops.

The hiss is there in all modes at the same volume and pitch.

All recent mods have been done by Ten-Tec. They should have improved the hiss problem somewhat, although I never heard the radio before the mods were done. I just expected the hiss to be DOWN somewhat compared to my Icom.

After the PBT filters, there's a mixer, and then three stages of RF amping, mixing for audio, a few AF stages, then out to the speaker.

Is it being generated in the RF amp stages, or in the AF stages?

If the RF stages, what can I really do about it?

--

73,

----- The
 \ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live \$5.00
WAC-CW/SSB WAS DXCC - 130 QSLed on dipoles -----| Dipoles! Antenna!

Date: Fri, 21 Oct 1994 12:01:29 LOCAL
From: nielsen@primenet.com (Bob Nielsen)
Subject: TH-48 mods wanted

I have been looking around for quite a while for mods for the Kenwood TH-48, but have been unable to find anything. I would like to extend the UHF XMIT/RCV frequency range down to 430 MHz or lower and also extend the VHF receive range up a bit, if possible. Does anyone know of a source for mod information for this radio?

de Bob w6swe/7

Date: Sun, 23 Oct 1994 00:49:15 GMT
From: brownell@tiger.jvnc.net (Vern Brownell)
Subject: Yaesu FT900 mods?

Has anyone found any mods to the new Yaesu FT900 HF rig? I checked most of the common ftp servers.

Thanks!

--
Vern Brownell
Voice: +1 212 902 3471

Work: vern.brownell@fi.gs.com
Home: vern@brownell.com

NN1R{/2, /6Y5}	NRA	'91 Vanagon Syncro Westfalia Camper
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Date: Sat, 22 Oct 1994 14:43:29 GMT
From: gary@ke4zv.atl.ga.us (Gary Coffman)

References<384fjs\$3pn@hp-col.col.hp.com> <387aoj\$9ab@eram.esi.com.au>,
<782812214snz@g8sjp.demon.co.uk>
Reply-To: gary@ke4zv.atl.ga.us (Gary Coffman)
Subject: Re: Alinco 6M FM

```
In article <782812214snz@g8s.jp.demon.co.uk> ip@g8s.jp.demon.co.uk writes:
>> In article <384fjs$3pn@hp-col.col.hp.com>,
>>     bobw@col.hp.com (Bob Witte) writes:
>>
>> | Remember this is an FM only rig... although I find 10 watts kind of puny
>> | for SSB work, it gets even more marginal for FM. With most 2M FM rigs
>> | running 30 to 50 watts these days, 10 seems kind of small.
>
>S'funny how different folks see different things. What's the difference, may
>I ask, between 10 watts and 30 (or even 50) watts? Lemmeseenow. 1/2 to 5/6
>of one 'S' point?. Ahh - I know what it is - it's the inherent non-linearity
>of most guess-meters which move a whole inch when presented with a 3dB change
>in signal. That'll explain it.
```

Actually, a CNR improvement of 3db can mean a SNR improvement of 10db or more thanks to the FM threshold effect. That can make the difference between a miserable noisy signal and one that's a pleasure to copy.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		emory!kd4nc!ke4zv!gary
534 Shannon Way		Guaranteed!		gary@ke4zv.atl.ga.us
Lawrenceville, GA 30244				

End of Ham-Equip Digest V94 #388
